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CLAIMS

1. A multi-service platform system, comprising:
  - a switch node coupled to receive a DS3 signal, wherein the DS3 signal is translated
  - 5 to a packet-based signal at the switch node;
  - a plurality of payload nodes; and
  - a packet switched backplane coupling the switch node and the plurality of payload nodes, wherein data from the DS3 signal, as the packet-based signal, is distributed to one or more of the plurality of payload nodes via the packet switched backplane.
- 10 2. The multi-service platform system of claim 1, wherein the packet-based signal can be one of an InfiniBand, Serial RapidIO and Ethernet packet based signal.
- 15 3. The multi-service platform system of claim 1, wherein the packet switched backplane comprises a plurality of packet-based links, wherein the switch node receives a plurality of DS3 signals, and wherein data from two of the plurality of DS3 signals, as the packet-based signal, are distributed over one of the plurality of packet-based links from the switch node to one of the plurality of payload nodes.
- 20 4. The multi-service platform system of claim 1, wherein the packet switched backplane is an embedded packet switched backplane.
5. The multi-service platform system of claim 1, wherein the packet switched backplane is an overlay packet switched backplane.
- 25 6. The multi-service platform system of claim 1, wherein the DS3 signal is processed at one or more of the plurality of payload nodes.
7. The multi-service platform system of claim 1, wherein the packet switched backplane is a CompactPCI Serial Mesh backplane.
- 30 8. The multi-service platform system of claim 1, wherein the packet switched backplane is a VMEbus switched serial standard backplane.

9. The multi-service platform system of claim 1, wherein distribution of the DS3 signal to one or more of the plurality of payload nodes is dynamically remapped.

5       10. A method, comprising:  
receiving a DS3 signal at a switch node;  
translating the DS3 signal to a packet-based signal at the switch node; and  
distributing data from the DS3 signal, as the packet-based signal, to one or more of a plurality of payload nodes via a packet switched backplane.

10      11. The method of claim 10, wherein the packet-based signal can be one of an InfiniBand, Serial RapidIO and Ethernet packet based signal.

15      12. The method of claim 10, wherein the packet switched backplane comprises a plurality of packet-based links between the switch node and the plurality of payload nodes, wherein receiving a DS3 signal comprises receiving a plurality of DS3 signals at the switch node, and wherein distributing the DS3 signal comprises distributing data from two of the plurality of DS3 signals, as the packet-based signal, over one of the plurality of packet-based links from the switch node to one of the plurality of payload nodes.

20      13. The method of claim 10, wherein the packet switched backplane is an embedded packet switched backplane.

25      14. The method of claim 10, wherein the packet switched backplane is an overlay packet switched backplane.

15. The method of claim 10, further comprising processing the DS3 signal at one or more of the plurality of payload nodes.

30      16. The method of claim 10, wherein the packet switched backplane is a CompactPCI Serial Mesh backplane.

17. The method of claim 10, wherein the packet switched backplane is a VMEbus switched serial standard backplane.

18. The method of claim 10, further comprising dynamically remapping  
5 distribution of the DS3 signal to one or more of the plurality of payload nodes.

19. A switch node comprising a computer-readable medium containing computer instructions for instructing a processor to perform a method of receiving and processing a DS3 signal in a multi-service platform system, the instructions comprising:

10 receiving the DS3 signal at the switch node;  
translating the DS3 signal to a packet-based signal at the switch node; and  
distributing data from the DS3 signal, as the packet-based signal, to one or more of a plurality of payload nodes via a packet switched backplane.

15 20. The computer-readable medium of claim 19, wherein the packet-based signal can be one of an InfiniBand, Serial RapidIO and Ethernet packet based signal.

21. The computer-readable medium of claim 19, wherein the packet switched backplane comprises a plurality of packet-based links between the switch node and the  
20 plurality of payload nodes, wherein receiving a DS3 signal comprises receiving a plurality of DS3 signals at the switch node, and wherein distributing the DS3 signal comprises distributing data from two of the plurality of DS3 signals, as the packet-based signal, over one of the plurality of packet-based links from the switch node to one of the plurality of payload nodes.

25 22. The computer-readable medium of claim 19, wherein the packet switched backplane is an embedded packet switched backplane.

23. The computer-readable medium of claim 19, wherein the packet switched  
30 backplane is an overlay packet switched backplane.

24. The computer-readable medium of claim 19, further comprising processing the DS3 signal at one or more of the plurality of payload nodes.

25. The computer-readable medium of claim 19, wherein the packet switched backplane is a CompactPCI Serial Mesh backplane.

5           26. The computer-readable medium of claim 19, wherein the packet switched backplane is a VMEbus switched serial standard backplane.

27. The computer-readable medium of claim 19, further comprising dynamically remapping distribution of the DS3 signal to one or more of the plurality of payload nodes.